

What is claimed is:

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1. An antenna built-in type mobile phone comprising:
a mobile phone main body; and
5 a battery detachably attached to the mobile phone main body and having
an antenna at a predetermined portion therein.
 2. The mobile phone according to claim 1, wherein the battery
comprising:
10 a battery cell in a predetermined form,
an antenna positioned at a predetermined portion within the battery cell,
and
a battery pack for holding the battery cell and the antenna.
 - 15 3. The mobile phone according to claim 2, wherein a dielectric
substance or a space exists between the antenna and the battery cell.
 4. The mobile phone according to claim 2, wherein the antenna is
positioned at an upper portion of the battery cell.
 - 20 5. The mobile phone according to claim 2, wherein the antenna is
positioned at a side portion of the battery cell.
 6. The mobile phone according to claim 5, wherein the side portion
25 of the battery cell is the outer side of the battery.

7. The mobile phone according to claim 2, wherein the antenna is formed by a single or a many-fold wire.

8. The mobile phone according to claim 7, wherein the antenna is of a linear, a zigzag or an oval shape.

9. An antenna built-in type mobile phone comprising:
a mobile phone main body; and
a battery detachably attached to the mobile phone main body
of which the battery comprising:
a battery cell;
an antenna positioned adjacent to the battery cell; and
a battery pack for holding the battery cell and the antenna therein.

10. The mobile phone according to claim 9, wherein a dielectric substance or a space exists between the antenna and the battery cell.

11. The mobile phone according to claim 9, wherein the antenna is positioned at an upper portion or at a side portion of the battery cell.

12. The mobile phone according to claim 11, wherein the side portion of the battery cell is the outer side of the battery.

13. The mobile phone according to claim 9, wherein the antenna is formed by a single or a many-fold wire.

14. A battery of a mobile phone comprising:

a battery cell;

an antenna electrically connected with a mobile phone main body and implemented at a predetermined position adjacent to the battery cell; and

a battery pack holding the battery cell and the antenna therein

15. The battery according to claim 14, wherein a dielectric substance or a space exists between the antenna and the battery cell.

16. The battery according to claim 14, wherein the antenna is positioned at the upper portion of the battery cell.

17. The battery according to claim 14, wherein the antenna is positioned at the side portion of the battery cell.

18. The battery according to claim 17, wherein the side surface of the battery cell is the outer side surface of the battery.

19. The battery according to claim 14, wherein the antenna is formed by a single or a many-fold wire.

20. The battery according to claim 14, wherein the antenna is of a linear or a zigzag shape.